

Bi-weekly US ATLAS Computing Facilities Performance Review & other comments

Rob Gardner
US ATLAS Computing Integration and
Operations Meeting
March 6, 2013

Very brief this week

- Facilities capacity updating
- Storage capacity report
- CPU-hours delivered
- Analysis availability
- Total throughput
- US ATLAS Computing Facilities meeting in Indianapolis

Spreadsheet at v27.2

Updates to <https://www.usatlas.bnl.gov/twiki/bin/view/Admins/CapacitySummary>

Normalization-factors-USATLAS-v27 ☆

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Comments Share

Rob Gardner

Notification settings

Add a comment

Rob Gardner 9:41 AM Feb 22
I updated our CPU numbers which were slightly off and updated our storage to 2.1PB. This does not yet include the 576 TB that's about to come online. - Saul
Reply • Resolve

Saul Youssef 10:07 AM Feb 22
Are maximum number of analysis jobs is ~1500 (full BU site) + ~600 at Harvard.
Reply to this comment...

Rob Gardner 9:01 AM Feb 22
Added row for NET2 totals (job slots and kHS06)
Reply • Resolve

Rob Gardner 8:48 AM Feb 22
I incremented the version to v27-v2, reflecting update to MWT2 storage
Reply • Resolve

THE US ATLAS FACILITY

	E	F	G	H	I	J	K	L	M	N
1	rwg									Best Guess
2										WLCG
3										measured
4										benchmarks
										4.0
										conversion
										factor
										conversion
										Clean
										up from BB or
										WLCG)
122			4,636		39,880					
123										
124										
125			Job slots		HS-06					
126			32,648		302,808					
127			11,936		118,832					
128			20,712		180,785					
129										
130										
131										
132										
133										
134										
135										
136										
137										
138										
139										

Add

- Use Google ID if you have it (please get one?)
- Comments when updating are useful

A little annotation helps

Normalization-factors-USATLAS-v27 ☆

File Edit View Insert Format Data Tools Help Last edit was made 12 days ago by anonymous

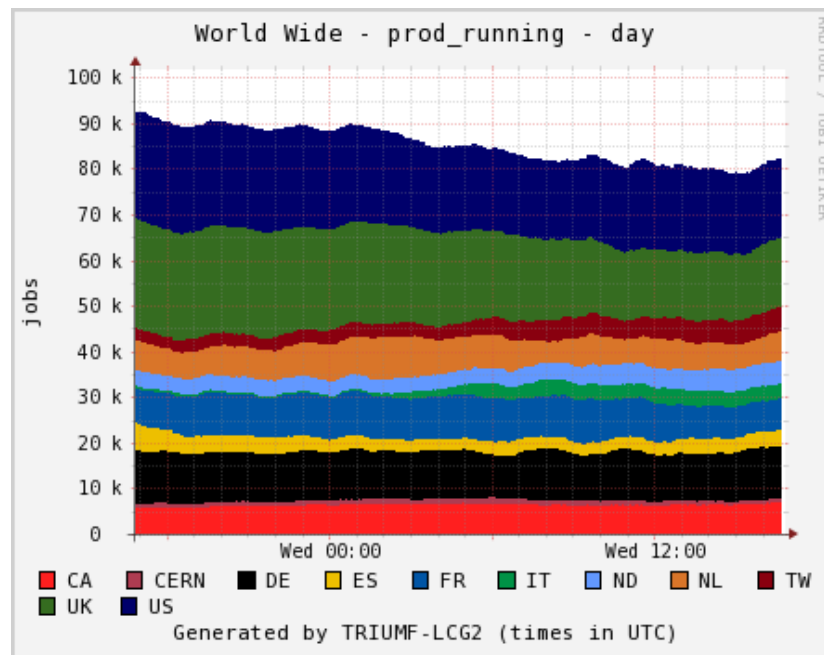
Center

A	B	C	D	E	
THE US ATLAS FACILITY		v27.2	2/22/2013	rwg	
	http://www.usatlas.bnl.gov/twiki/bin/view/Admins/CapacitySummary				
Site			Version	GHz	Job

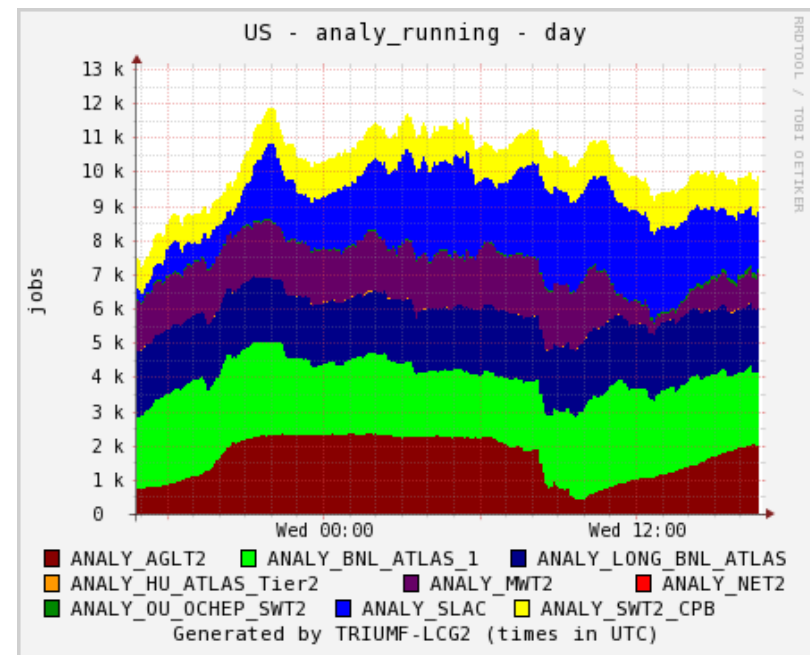
- Update version (e.g. v27.3) and add date & initials

Center	Job Slots	ANALY slots
T1	11,936	8952
NET2	3,364	2100
SWT2	4,636	3477
MWT2	5,996	4497
AGLT2	4,340	3255
WT2	2,760	2070
Facility Total	33,032	24774
Tier2 Total	21,096	15822

23546

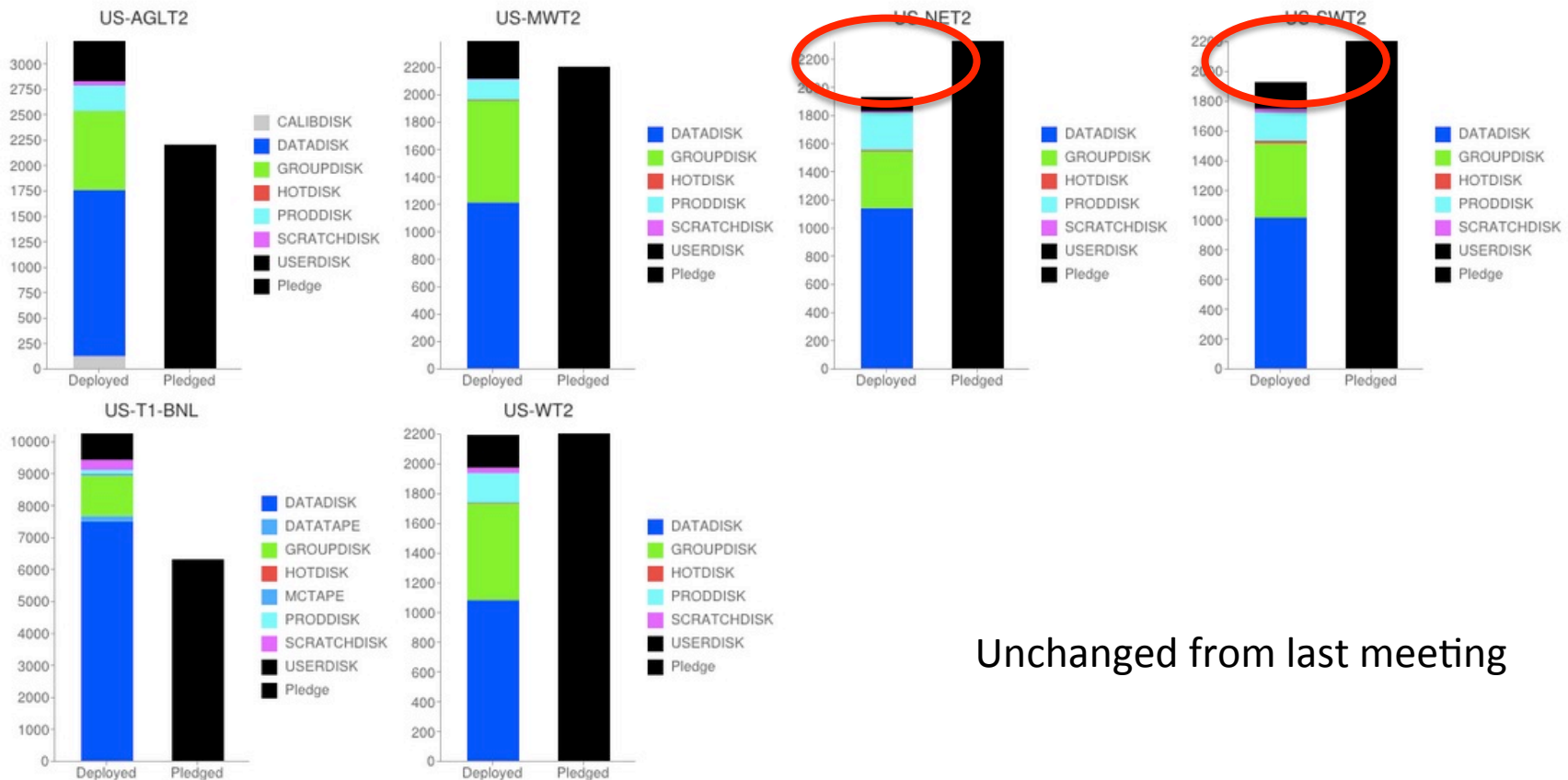


10045



Delivering more than installed capacity; $\sim \frac{1}{2}$ available analysis slots

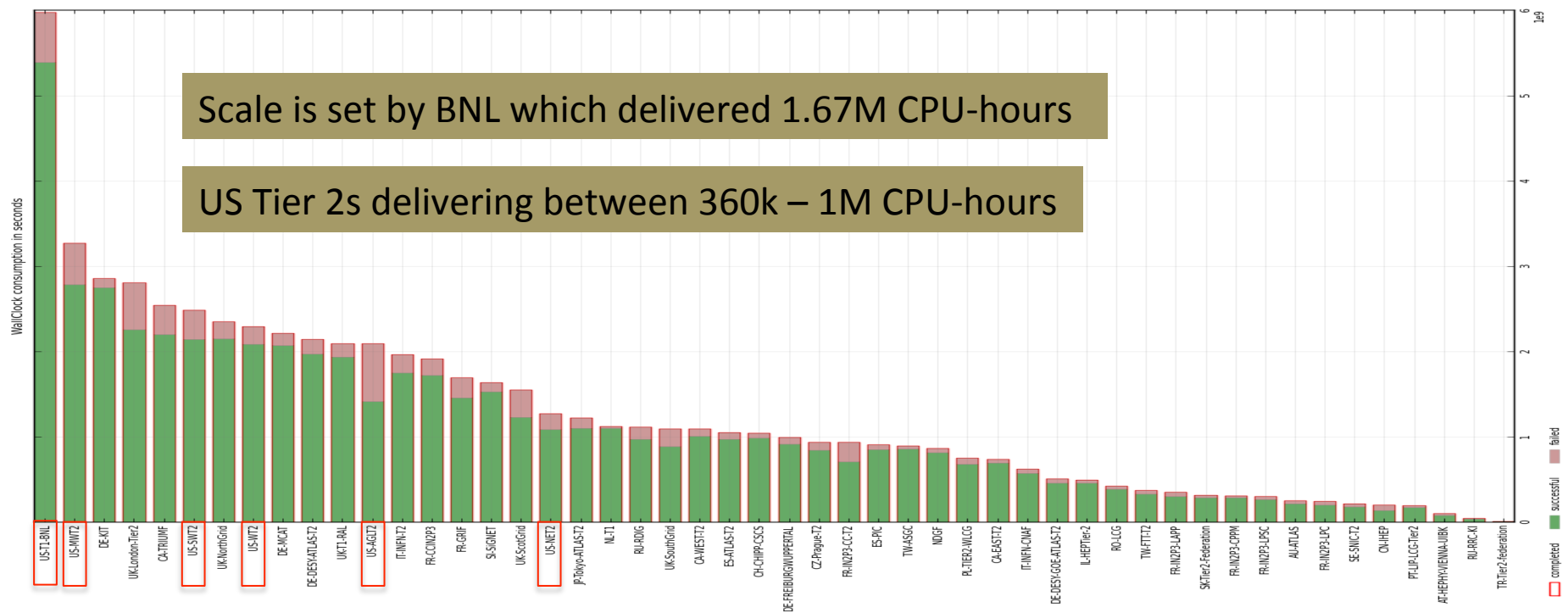
Reported storage capacity



Unchanged from last meeting

'S gone next meeting?

Wall time delivered by federation (last week)

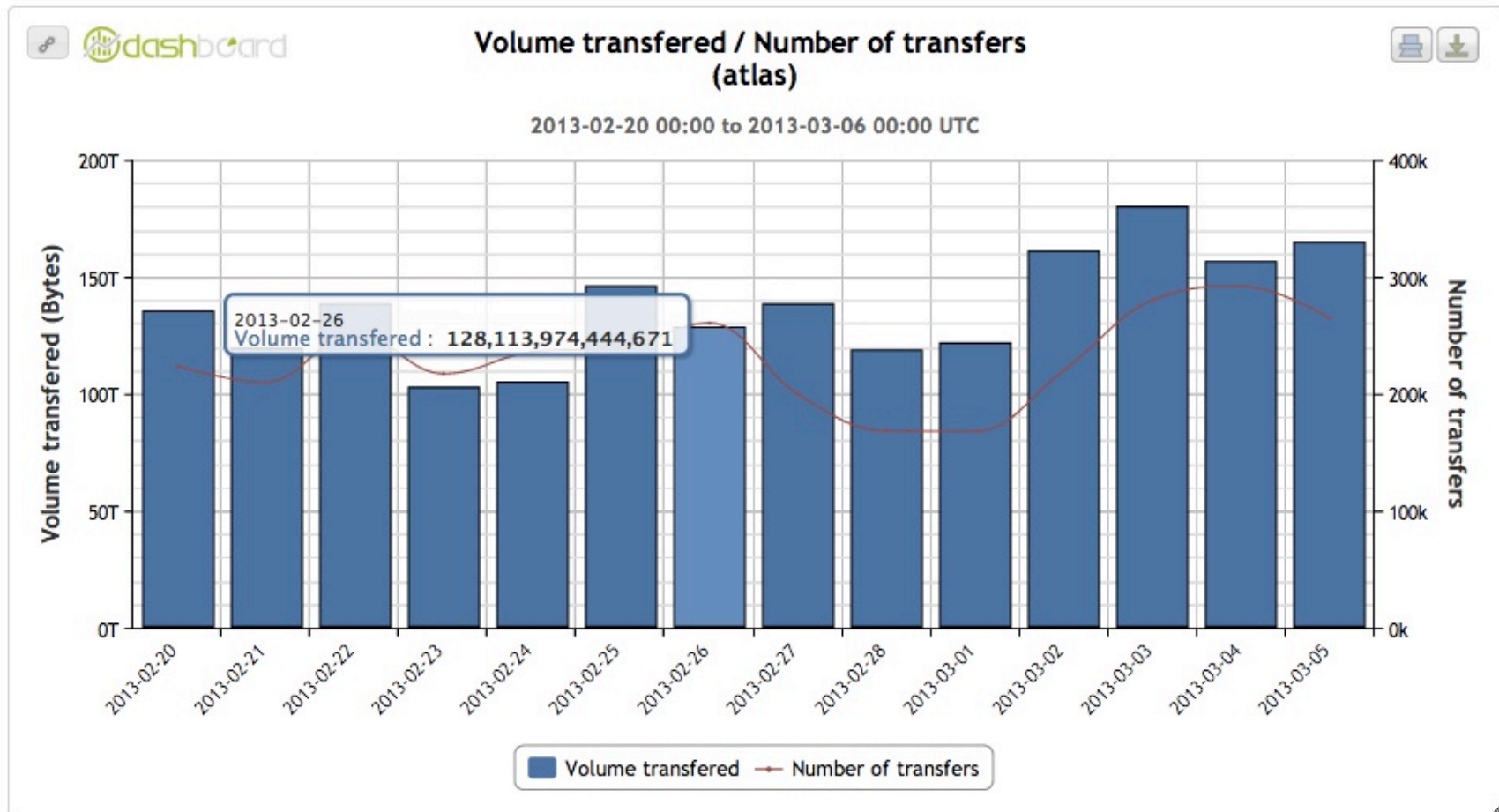


Analysis availability

Historic view for "panda analy status NEW" from 15:37 03.02.2013 to 15:37 05.03.2013													
Show <input type="text" value="100"/> entries										Search: <input type="text"/>			
SITE Name	TIER	CLOUD	History plot time bin = 60 hours	offline		brokeroff		online		NoQueue		test	
				%	count	%	count	%	count	%	count	%	count
AGLT2	T2D	US		0	0	0	0	94.78	13	0	0	4.71	6
BNL-ATLAS	T1	US		0	0	0	0	99.49	10	0	0	0	0
BU_ATLAS_Tier2	T2D	US		0	0	3.89	4	95.61	13	0	0	0	0
MWT2	T2D	US		0	0	1.2	2	98.3	13	0	0	0	0
OU_OCHEP_SWT2	T2	US		0	0	0	0	95.95	21	0	0	3.55	10
SWT2_CPB	T2	US		0	0	0	0	97.72	16	0	0	1.74	4
WT2	T2D	US		0	0	3.66	7	95.74	23	0	0	0	0
Showing 1 to 7 of 7 entries										First Previous 1 Next Last			

No significant problems

Total data transferred from US sources



Lots and lots of deeper studies could be done here.
Good to note the scale at least... bit of an uptick this week.

OSG All Hands

chaired by Robert Quick (Indiana University) , Fredrick Luehring (Indiana University)

from Monday 11 March 2013 at 08:00 to Thursday 14 March 2013 at 18:00 (US/Central)
at Indianapolis

Manage ▾

Description All times listed are local to the conference venue which is in the Eastern US Timezone (EST).

Support goc@opensciencegrid.org

- 09:45 - 10:30 **ATLAS Tier 2/3 Workshop: IT-167**
Convener: Robert Gardner (University of Chicago)
- 09:45 **What's next for the US ATLAS Computing Facility 20'**
Speaker: Robert Gardner (University of Chicago)
- 10:05 **Cloud activities at BNL 20'**
Speaker: John Hover (Brookhaven National Laboratory)
- 10:30 - 11:00 Morning Break
- 11:00 - 12:30 **ATLAS Tier 2/3 Workshop**
Convener: Robert Gardner (University of Chicago)
- 11:00 **Out of the basement, into the cloud: virtualizing the Tier 3 20'**
Speaker: Lincoln Byrant (University of Chicago)
- 11:20 **Elastic Colony Manager: Reactive Capacity Growth for Virtual Clusters 10'**
Speaker: David Champion (University of Chicago)
- 11:30 **ATLAS and the PKI transition 15'**
Speaker: John Hover (Brookhaven National Laboratory)
- 11:45 **US ATLAS Networking Open Discussion 20'**
Speaker: Shawn McKee (Univ. of Michigan)

14:00 - 15:30

Joint ATLAS/CMS Workshop

Conveners: Ken Bloom (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago) ,
Rob Snihur (UNL/FNAL)

14:00 **Future Directions** 30'

Speaker: Ian Fisk (Fermilab)

14:30 **Any Data, Anytime, Anywhere** 20'

Speaker: Dan Bradley (University of Wisconsin)

14:50 **Federating ATLAS Storage using Xrootd** 20'

Speaker: Robert Gardner (University of Chicago)

15:10 **Operational issues supporting federated storage services and OSG** 20'

Speakers: Brian Bockelman (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago)

15:30 - 15:55

Coffee Break

15:55 - 16:30

Joint ATLAS/CMS Workshop: IT-152

Conveners: Ken Bloom (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago) ,
Rob Snihur (UNL/FNAL)

15:55 **Networking Potpourri** 20'

Speaker: Jason Zurawski (Internet2)

16:15 **LHCONE and US LHC computing facilities** 15'

Speaker: Shawn McKee (Univ. of Michigan)

16:30 - 17:30

WLCG and EGI Interoperations

Contributors from EGI and WLCG talk about interoperability.

Convener: Rob Quick (Indiana University)

16:30 **Update on WLCG Operations Coordination and Commissioning Team** 20'

Speaker: Maria Girone (CERN - WLCG Operatins)

16:50 **WLCG Service Availability Monitoring (SAM)** 20'

Speaker: David Collados (CERN - WLCG Monitoring)

17:10 **EGI Operations and Interoperability with OSG** 20'

Speaker: Peter Solagna (EGI - Operations Manager)

Conclusions

- Did not look closely at throughput
- Otherwise the facility is delivering nicely
- Last month end of FY13Q2
 - So good to start thinking about updates to <https://www.usatlas.bnl.gov/twiki/bin/view/Admins/SiteCertificationP24>
- Starting to curate links here, for future use in meetings
 - <https://www.usatlas.bnl.gov/twiki/bin/view/Admins/PerformanceDashboard>
- In today's meeting we've noted a number of group tasks/issues that have facility-wide impacts:
 - SL6, OSG wn + DQ2, OASIS, OSG opp. access, PandaMover deprec., virtualizing Tier2s for Tier3s, LHCONE, etc..
- See some of you in Indianapolis!